

## CLAIMS:

1. An electronic device, comprising:  
a data storage device for storing N data elements, N being an integer with a value of at least two, the data storage device comprising a first collection of data storage elements; and  
5 an address decoder having an output coupled to the first collection of data storage elements for accessing a data storage element from the first collection of data storage elements on the basis of a bit pattern;  
characterized by further comprising an address generator comprising a modulo-N counter for generating the bit pattern.  
10
2. An electronic device, as claimed in claim 1, characterized by comprising a look-up table being operable as the first collection of data storage elements in a data storage configuration of the electronic device.
- 15 3. An electronic device as claimed in claim 1 or 2, characterized by being arranged to:  
perform a read operation on the data storage element in a first phase of a control signal; and  
perform a write operation on the data storage element in a second phase of the  
20 control signal.
4. An electronic device as claimed in claim 3, characterized in that a data storage element comprises a configurable switch coupled between a memory element and a data input of the data storage device; the configurable switch being conductive during at least a  
25 part of the second phase of the control signal.
5. An electronic device as claimed in claim 3, characterized by the data storage device further comprising a second collection of data storage elements in at least a data storage configuration of the electronic device; the electronic device further comprising

control circuitry coupled between the control signal and the data storage device for selecting one of the first and second collection of data storage elements responsive to a selection signal.

5 6. An electronic device as claimed in claim 5, characterized by the second collection of data storage elements being responsive to the address decoder.

7. An electronic device as claimed in claim 5, characterized by the data storage device comprising a third collection of data storage elements and a fourth collection of data storage elements in at least the data storage configuration of the electronic device, the third collection and the fourth collection of data storage elements being responsive to a further address decoder;

10 the control circuitry further being arranged to select one of the first, second, third and fourth collection of data storage elements responsive to the selection signal and a  
15 further selection signal.

8. An electronic device as claimed in claim 7, characterized in that the selection signal and the further selection signal are derived from the most significant bits of the bit pattern.

20

9. An electronic device as claimed in claim 5, characterized in that the control circuitry further comprises a configuration network for configuring a size of the data storage device.